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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/161,283	09/28/1998	TOMOHIRO MAEKAWA	PMS255979	7428

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EXAMINER
KRUER, KEVIN R

ART UNIT	PAPER NUMBER
1773	18

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Please find below and/or attached an Office communication concerning this application or proceeding.

AS-18

Office Action Summary	Application No. 09/161,283	Applicant(s) MAEKAWA, TOMOHIRO	
	Examiner Kevin R Kruer	Art Unit 1773	

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1,2,5 and 8-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1, 2, 5, and 8-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant does not have support for the range "5-20 parts by weight rubber containing polymer" in layer (B). The specification teaches that the composition may comprise 5-50 parts by weigh rubber containing polymer, but there is no support for the endpoint of 20 parts by weight. Nor are there any working examples that contain 20 parts by weight rubber containing particles.

Similarly, there is no support for a layer (A) that comprises 3-50 parts by weight rubber containing polymer in layer (A) as claimed in claim 19. The specification has support for 0-50pbw and 3-20 pbw, but not 3-50pbw. Furthermore, there is no working example that comprises 3pbw rubber-containing polymer.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 19 recites the broad recitation that the base resin comprises 5-70pbw of a rubber-containing polymer, and claim 18, from which claim 19 depends, also recites that the base resin comprises 5-20pbw of a rubber containing polymer which is the narrower statement of the range/limitation.

Similarly, claim 20 recited the broad limitation that the base resin contains 5-50pbw of a rubber containing polymer, and claim 18, from which claim 18 depends, recites that the base resin comprises 5-20pbw of a rubber containing polymer which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 102

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 5, 8, and 16-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Minghetti et al. (US 5,415,931). Minghetti teaches a molded composition comprising 80-95wt% by weight polymethyl methacrylate and about 5-25wt% of particulate polymethyl methacrylate (claim 1). Said particles have a particle size of about 0.1 to 2.0mm (claim 1) and comprise crosslinked PMMA (col 3, line 51). The polymethyl methacrylate should comprise at least about 90wt% methyl methacrylate (col 3, line 30). The examiner takes the position that the article taught in Minghetti reads on the claimed invention when all three layers comprise the same composition.

Since the particulate loading level taught in Minghetti is encompassed by the particle loading levels claimed in claim 18-20, the examiner takes the position that Minghetti anticipates the claimed laminate.

Claim Rejections - 35 USC § 103

Claims 9-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minghetti et al (US 5,415,931), as applied to claims 11, 2, 5, 8, and 16-21 above, and further in view of Hatakeyama (US 5,804,287) for reasons of record.

Claims 1, 2, 5, and 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatakeyama et al. (US 5,804,287) in view of Minghetti et al. (US 5,242,968).

R sponse to Arguments

Applicant's arguments filed February 9, 2002 have been fully considered but they are not persuasive. Applicant argues that particles taught in Minghetti expand to over 200% of their original volume. However, Applicant never teaches that the claimed particles do not expand. Thus, the claims are not limited to particles that do not expand. Furthermore, the particle sizes taught by Minghetti (aka 100-2000um) overlaps Applicant's claimed range (1-100um).

Applicant further argues that the claimed particles do not dissolve into the base resin. However, the particles taught by Minghetti are crosslinked methyl methacrylate resin particles. Applicant teaches crosslinked methyl methacrylate resin particles do not dissolve into the base resin (original claim 4). Furthermore, while Minghetti teaches that the particles absorb the matrix resin (col 2, line 24), the final product still contains "particles and the matrix (col 5, lines 9)." Thus, the particles never dissolve.

Furthermore, Applicant argues that the composition taught in Minghetti and the laminate taught in Hatakeyama would not provide a molded article having effectively smaller bias of thickness in secondary thermoforming. However, such a property is never claimed. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26, USPQ2d 1057 (Fed Cir 1993).

With respect to the rejection of claims 9-15 as unpatentable over Minghetti in view of Hatakeyama, Applicant request a Declaration from the Examiner setting forth the facts needed to the make of the rejection. Specifically, Applicant argues that the examiner already has stated on the record that Hatakeyama does not teach (1) the base layer should comprise rubber-containing polymer, (2) a three-layered film, and (3) the presence of methyl methacrylate resin particles. However, the current rejection does not rely upon Hatakeyama for such teachings. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See In re Keller 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co. 800 F.2d 1091, 231 Uspq 375 (Fed. Cir. 1986).

With respect to the rejection of claims 1, 2, 5, and 9-17 as unpatentable over Hatakeyama in view of Minghetti, Applicant argues that Hatakeyama does not teach a three-layer laminate. The examiner agrees, but argues that it would have been obvious to one having ordinary skill in the art to laminate acrylic on both sides of the resin layer given the expectation of equivalent results. Applicant further argues that the acrylic resin layers taught in Hatakeyama do not contain insoluble acrylic resin particles. However, the examiner acknowledged this deficiency in the rejection, and took the position that Minghetti would have motivated one of ordinary skill in the art to add such particles to the acrylic film taught in Hatakeyama. Thus, Applicant's arguments are not persuasive.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R Kruer whose telephone number is 703-305-0025. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

KRK
April 19, 2002

Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700